IN THE CLAIMS:

18. (Currently amended and previously amended) A mold of a type for dies and molding of articles using dies requiring heat to be taken from the mold from time to time, wherein the mold includes at least one completely closed chamber to provide a closed system and each said at least one completely closed chamber [having] being provided with a single quantity of liquid therein which extends to cover at least one of the areas from which heat is to be taken, and a space above the single quantity of liquid and within each of said at least one completely closed chamber, wherein pressure is set at a level which will enable the single quantity of liquid to boil at a selected temperature, and condensing means to effect, by cooling, condensation of the vapor or vapors of from the single quantity liquid in the space, the single quantity of liquid having a volume such that it has an upper level above one of the areas of the mold to be cooled and substantially only the vapor of the liquid within the chamber above the upper level of the liquid so that the completely closed chamber keeps the same single quantity of liquid through the full cooling process and the total overall temperature of the mold is kept relatively uniform and provides for effective heat transmission through the mold.

19. (Currently amended) A mold as claimed in claim 18, wherein the chamber is shaped and positioned so that all of the working surfaces of the mold are serviced equally by the liquid therein and the liquid will have effective access to each of the areas of the mold from which heat is to be taken and the same single quantity of liquid [blows] flows back to the body of the liquid in the completely closed chamber.

20. (Currently amended) A mold as claimed in either of claim[s] 18 or 19, wherein the liquid is water only within the space in the chamber above the liquid level.

21. (Previously added and currently amended) A mold as claimed in either [of] claim[s] 18 or 19, wherein the mold is a mold for molding of plastics materials.

22. (Previously added and currently amended) A mold as claimed in either [of] claim[s] 18 or 19, wherein the mold is a die for the mold casting of metals.

23. (Previously added and currently amended) A mold as claimed in either [of] claim[s] 18 or 19, wherein the mold is a mold for injection molding of plastic material.

24. (Previously added and currently amended) A mold as claimed in either [of] claim[s] 18 or 19, wherein the mold is a mold for molding by thermoforming of plastic materials.

25. (Previously amended and currently amended) A mold <u>for dies and articles using dies</u> having an internal cooling arrangement which is a completely closed chamber having therein a liquid with a volume such that it has an upper level [about] <u>above</u> at least some of the areas of the mold to be cooled and has substantially only the vapor or vapors of the liquid in a space within the chamber above the upper level of the liquid and condensing means <u>using the same liquid</u> to effect, by cooling, condensation of the vapor or vapors of the liquid, said completely closed chamber being integrated with the mold, and total overall temperature of the mold is maintained relatively uniform and the cooling condenses the vapor or vapors <u>derived from the liquid used by the condensing means</u>.

26. (Currently amended) A mold for injection molding of plastic materials <u>for dies and articles using dies</u> having an internal cooling arrangement which is a completely closed chamber partially filled with a liquid having an upper level sufficient that at least

some areas of the mold within the chamber adjacent to parts of the mold to be cooled are accessed by the liquid when the mold is in use and provided in a space in the completely closed chamber above the liquid, there is substantially only the vapor of the liquid and condensing means within this space using the same liquid in the completely closed chamber.

27. (Currently amended) A mold for injection molding of plastic materials for dies and articles using dies which provides for effective heat transmission throughout the mold, the mold having an internal cooling arrangement [which is] using a single cooling liquid and includes a completely closed chamber partially filled with [a] the single cooling liquid with an upper level of sufficient height so that at least some areas of the mold within the completely closed chamber and adjacent parts of the mold to be cooled are accessed by the single cooling liquid when the mold is in use and, in a space in the chamber above the liquid, substantially only the vapor of the single cooling liquid, and an arrangement to provide cooling of any vapor using the single cooling liquid within the space in the chamber above the liquid level to effect at least some condensation of the vapor thereby so that the overall temperature of the mold is kept relatively uniform and heat is dissipated by the cooling of the vapor.

28. (Previously added) A mold as in preceding claim 25 where the liquid is water.

29. (Previously added) A mold as in preceding claim 25 wherein the vapor is water vapor.

30. (Previously added) A mold as in any one of the preceding claims 26 or 27, wherein the mold is a die, and including at least a heating means located within the

chamber within the liquid such that during a standby time, the temperature of the die or mold can be kept within a selected range of temperatures.

31. (Currently amended and previously amended) A mold as claimed in [any one of the preceding] claim[s] 26 or 27 wherein the internal cooling arrangement additionally includes cooling means comprising a tube, a core in the tube and means to direct cooling water through the tube.

32. (Currently amended and previously amended) A method of cooling of working parts of a mold for dies and articles using dies where the mold has at least one completely closed chamber having liquid therein which extends to cover at least one of the areas from which heat is to be taken, and a space above the liquid and within the completely closed chamber in which pressure within the space is caused to be set at a level which will enable the liquid to boil at a selected temperature, said selected temperature being at a level such that the temperature is below a temperature of the area from which heat is to be taken this being by reason of, as a first step, partially filling each of said at least one completely closed chambers with the liquid and then extracting air above the liquid so that there is substantially only the vapor or vapors of the liquid within the completely closed chamber above the upper level of the liquid, and passing at a selected cooling temperature, liquid through condensing means to effect, by such cooling, condensation of vapor of the liquid in the space.

33. (Currently amended and previously amended) A method of cooling of working parts of a mold for dies and molding of articles using dies where the mold has at least one completely closed chamber having liquid therein which extends to cover at least one of the areas from which heat is to be taken, each of said at least one completely

closed chamber being integrated with the mold and a space above the liquid and within the completely closed chamber in which pressure within the space is caused to be set at a level which will enable the liquid to boil at a selected temperature, said selected temperature being at a level such that the temperature is below a temperature of the area from which heat is to be taken this being by reason of, as a first step, filling of the completely closed chamber with the liquid and then extracting a selected portion of the liquid without allowing air to replace the extracting liquid, and passing at a selected cooling temperature, liquid through condensing means to effect, by such cooling, condensation of vapor of the liquid in the space.

34. (Previously added and currently amended) A method as claimed in [any one of the preceding] claim[s] 32 [and]or 33 wherein the liquid is water.